

Application No. 09/881,040

Docket No. 30003033-02 (1509-188)

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1. *(Currently amended)* A service delivery method comprising the steps of:

(a) conducting a transaction of a user purchasing a service or product which qualifies the user as ~~authorized~~ to benefit from a particular location-triggered service and, ~~thereupon after the transaction has been conducted,~~ storing:

location data indicative of at least one location where service delivery is to be triggered[[,]]; and

a user-associated instance of an executable program, ~~customized for said transaction,~~ for implementing said particular service, the program instance being customized for said transaction and distinct from the location data; and

(b) subsequently detecting a location match between the location of the user, as indicated by the location of a mobile entity associated with the user, and a location indicated by said location data, and thereupon initiating execution of the user-associated program instance to deliver said particular service to the user.

2-6. *(Cancelled)*

7. *(Currently amended)* A method according to claim 25, wherein the user-associated program instance includes user identity data and is digitally-signed by the party

**Application No. 09/881,040****Docket No. 30003033-02 (1509-188)**

that carried out the qualification in **[[step]]** (a) whereby the service provider system can check the authenticity of the user-identity data, the user mobile entity having an associated key pair, formed by a public-key and a private key, and being required by the service provider system in **[[step]]** (b) to authenticate its identity by using its private key to sign and return data proposed by the service provider system.

8. *(Previously presented)* A method according to claim 1, wherein the user-associated program instance is a customisation of a generic program for implementing the service.

9. *(Currently amended)* A method according to claim 1, wherein in **[[step]]** (b), service delivery is conditional upon the user inputting a personal identification code.

10. *(Previously presented)* A method according to claim 1, wherein service delivery only continues whilst the user's current location matches with a location indicated by the location data.

11. *(Previously presented)* A method according to claim 1, wherein once initiated, service delivery is continued until completion.

12. *(Cancelled)*

13. *(Previously presented)* A method according to claim 1, wherein the location data is indicative of multiple locations.

**Application No. 09/881,040****Docket No. 30003033-02 (1509-188)**

14. (*Currently amended*) A method according to claim 1, wherein multiple user-associated program instances associated with different services to be delivered to the same user[[.]] are stored in a common repository.

15. (*Previously presented*) A method according to claim 1, wherein the user-associated program instance is passed by the party that carries out the qualification to the user or to a third-party, the program instance being digitally signed by the party that carries out the qualification step whereby to enable an eventual service deliverer to check the origin and authenticity of the user-associated program instance.

16. (*Currently amended*) A method according to claim 1, wherein the current user location is provided to the entity carrying out location matching in [[step]] (b) by a trusted location service provider and is digitally-signed by the latter.

17. (*Previously presented*) A method according to claim 1, wherein the user-associated program instance specifies a particular number of times (including only once) that it can be run.

18. (*Currently amended*) A service delivery system comprising:

a location-data repository;

a service repository;

a service factory;

a qualification subsystem for conducting a transaction of a user purchasing a service or product that qualifies the user to benefit from a particular location-triggered service, the

**Application No. 09/881,040****Docket No. 30003033-02 (1509-188)**

qualification subsystem being arranged, upon determining that the user is so qualified, both to store in the location-data repository location data indicative of at least one location where service delivery is to be triggered, and also to create in the service factory and store in the service repository a user-associated instance of executable program, customized for said transaction, for implementing said particular service, this program instance being customized for said transaction and being distinct from said location data;

a service execution environment for executing user-associated program instances;

a location-match subsystem for detecting a location match between the location of the user, as indicated by the location of a mobile entity associated with the user, and a location indicated by said location data; and

a control arrangement responsive to the location-match subsystem detecting **[[a]]** said location match to initiate execution of the user-associated program instance to deliver said particular service to the user.

**19. (Previously presented)** A system according to claim 18, wherein the location-data repository is incorporated in said mobile entity associated with the user.

**20. (Previously presented)** A system according to claim 18, wherein the service repository is incorporated in said mobile entity associated with the user.

**21. (Previously presented)** A system according to claim 20, wherein the service execution environment is incorporated in said mobile entity associated with the user.

**Application No. 09/881,040****Docket No. 30003033-02 (1509-188)**

22. *(Currently amended)* A system according to claim 20, wherein the service execution environment is separate from the mobile entity but can inter-communicate with the latter via a wireless infrastructure at least when the mobile entity is positioned to give rise to a location match, the mobile entity being operative to pass the user-associated program instance to the execution environment via the wireless infrastructure upon occurrence of **[[a]]** said location match.

23. *(Currently amended)* A method according to claim 1, wherein in **[[step]]** (a), the user-associated program instance is stored in the mobile entity, the detection of **[[a]]** said location match in **[[step]]** (b) resulting in the program instance being executed at the mobile entity.

24. *(Currently amended)* A method according to claim 1, wherein in **[[step]]** (a), the user-associated program instance is stored in the mobile entity, the detection of **[[a]]** said location match in **[[step]]** (b) resulting in the program instance being passed from the mobile entity to a service provider system where it is then executed.

25. *(Currently amended)* A method according to claim 1, wherein in **[[step]]** (a), the user-associated program instance is stored in a service provider system, the detection of **[[a]]** said location match in **[[step]]** (b) resulting in the ~~pre~~ program instance being executed by the service provider system.

26. *(Previously presented)* A method according to claim 1, wherein the user-associated program instance and the location data are stored in the same entity.

**Application No. 09/881,040****Docket No. 30003033-02 (1509-188)**

27. *(Currently amended)* A method according to claim 1, wherein the user-associated program instance and the location data are stored in different entities, the location data having associated data enabling the entity storing the program instance to be informed when ~~[[a]]~~ said location match is detected in ~~[[step]]~~ (b).

28. *(Currently amended)* A service delivery method comprising ~~the steps of:~~

(a) qualifying a user as authorised to benefit from a particular location-triggered service, and ~~thereupon~~ thereafter storing:

location data indicative of at least one location where service delivery is to be triggered, and

a service token provided by a party that qualified the user to benefit from said particular service, the service token being distinct from said location data and indicative of the qualified user's entitlement to benefit from said particular service ~~[[and]]~~, the service token including a service identifier identifying said particular service and a qualifying-party indicator indicative of the party that qualified the user, the service token being stored in a mobile entity associated with the user, and

(b) subsequently detecting a location match between the location of the user, as indicated by the location of said mobile entity, and a location indicated by said location data, and ~~thereupon~~ thereafter passing the service token from the mobile entity to a service provider system where the service provider system ~~checks~~ uses the qualifying-part indicator to check that the service token originates from a party for which it is willing to provide service delivery before initiating delivery to the user of said particular service as identified by said service identifier.

Application No. 09/881,040

Docket No. 30003033-02 (1509-188)

29. *(Previously presented)* A method according to claim 28, wherein the service token includes communication address details of said service provider system.

30. *(Previously presented)* A method according to claim 29, wherein the service token further includes a password for accessing the service provider system.

31. *(Currently amended)* A method according to claim 28, wherein the service token includes both a service identifier and a user identifier, [[step]] and (b) including includes a sub-step of the service provide system checking the identity of the user of the mobile entity against the user identity in the service token.

32. *(Currently amended)* A method according to claim 28, wherein the service token is digitally-signed by the party that carried out the qualification in [[step]] (a), whereby the service provider system can check the authenticity of the token; the service token including user identity data identifying the qualified user, and the user mobile entity that passes the service token to the service provider system having an associated key pair, formed by a public-key and a private key, and being required by the service provider system in [[step]] (b) to authenticate its identity by using its private key to sign and return data proposed by the service provider system whereby the latter can check that the user associated with the mobile entity passing the service token to the service provider system is the qualified user identified by said user identity data included in the service token.

33. *(Currently amended)* A method according to claim 28, wherein service delivery in [[step]] (b) is conditional upon the user inputting a personal identification code.

**Application No. 09/881,040****Docket No. 30003033-02 (1509-188)**

34. *(Currently amended)* A method according to claim 28, wherein the service token is digitally signed by the party that carries out the qualification in **[[step]]** (a), the service provider system using this digital signing of the service token to check the origin and authenticity of the service token in **[[step]]** (b).

35. *(Currently amended)* A method according to claim 28, wherein the location data is stored in the mobile entity where it is compared in **[[step]]** (b) against the current location of the mobile entity as provided by one of:

a location server associated with said communications infrastructure usable by the mobile entity, and

location discovery means of the mobile entity,

in order to detect **[[a]]** said location match.

36. *(Previously presented)* A method according to claim 28, wherein the location data is indicative of multiple locations.

37. *(Previously presented)* A method according to claim 28, wherein multiple service tokens associated with different services to be delivered to the same user, are stored in a common repository.

38. *(Previously presented)* A method according to claim 28, wherein said service token specifies a particular number of times (including only once) that the associated service can be provided.



**Application No. 09/881,040****Docket No. 30003033-02 (1509-188)**

39. *(Previously presented)* A method according to claim 28, wherein the service token includes customisation data for customising a generic version of said particular service to the user.

40. *(Currently amended)* A service delivery system comprising:

a mobile entity associated with a user;

a location-data repository for storing location data;

a service-token repository, incorporated into said mobile entity, for storing at least one service token;

a qualification subsystem for determining whether said user qualifies to benefit from an instance of a particular location-triggered service, the qualification subsystem being arranged, upon determining that a user is so qualified, both to store in the location-data repository location data indicative of at least one location where service delivery is to be triggered, and also to store in the service-token repository a service token distinct from the location data and indicative of entitlement of the qualified user to benefit from for said particular service, the service token ~~[[and]]~~ including a service identifier identifying said particular service and a qualifying-party indicator indicative of a party operating the qualification subsystem;

a service delivery subsystem for providing said particular service, the service delivery subsystem being separate from said mobile entity;

a communications arrangement for enabling the mobile entity to communicate with the service delivery subsystem;

**Application No. 09/881,040****Docket No. 30003033-02 (1509-188)**

a location-match subsystem for detecting a location match between the location of the user, as indicated by the location of said mobile entity, and a location indicated by said location data; and

a control arrangement arranged to be responsive to the location-match subsystem detecting [[a]] said location match to cause the mobile entity to pass the service token to the service delivery subsystem,

the service provider system being arranged to use said qualifying-party indicator ~~identifier included in the service token~~ to check that the service token originates from a party for which it is willing to provide service delivery and, if so, to deliver said particular service to the user.

41. *(Previously presented)* A system according to claim 40, wherein the location-data repository is incorporated in said mobile entity associated with the user.

42 *(Previously presented)* A system according to claim 40, wherein the service token includes customisation data for customising a generic version of said particular service to the user.

43. *(Cancelled)*